

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>	Docket Number 229752001500	Application Number 09/980,370
	Applicant Charles A. COLLYER, et al.	
	International Filing Date: May 26, 2000	Group Art Unit To Be Assigned
	Mailing Date April 4, 2002	

COPY

U.S. PATENT DOCUMENTS

Examiner Initials	Ref. No.	Date	Document No.	Name	Class	Subclass	Filing Date If Appropriate

FOREIGN PATENT DOCUMENTS

Examiner Initials	Ref. No.	Date	Document No.	Country	Class	Subclass	Translation YES NO

OTHER DOCUMENTS

(including author, title, Date, Pertinent Pages, Etc.)

Examiner Initials	Ref. No.	Title
<i>LM</i>	1.	Aduse-Opoku et al. (1997). "The Tla Protein of <i>Porphyromonas Gingivalis</i> W50: A Homolog of the RI Protease Precursor (PrpRI) Is an Outer Membrane Receptor Required for Growth on Low Levels of Hemin," <i>J. Bacteriol.</i> 179(15):4778-4788.
	2.	Albandar et al. (1997). "Putative Periodontal Pathogens in Subgingival Plaque of Young Adults With and Without Early-Onset Periodontitis," <i>J. Periodontol</i> 68:973-981.
	3.	Altschul et al. (1990). "Basic Local Alignment Search Tool," <i>J. Mol. Biol.</i> 215:403-410.
	4.	Altschul et al. (1997). "Gapped BLAST and PSI-BLAST: A New Generation of Protein Database Search Programs," <i>Nucl. Acids Res.</i> 25(17):3389-3402.
	5.	Argos, P. (1987). "A Sensitive Procedure to Compare Amino Acid Sequences," <i>J. Mol. Biol.</i> 193:385-396.
	6.	Beck et al. (1998). "Periodontitis: A Risk Factor for Coronary Heart Disease," <i>Ann. Periodontol</i> 3(1):127-141.
	7.	Bedi, G.S. and T. Williams. (1994). "Purification and Characterization of a Collagen-Degrading Protease from <i>Porphyromonas Gingivalis</i> ," <i>J. Biol. Chem.</i> 269(1):599-606.
	8.	Bonner W.M. and R.A. Laskey. (1974). "A Film Detection Method for Tritium-Labelled Proteins and Nucleic Acids in Polyacrylamide Gels," <i>Eur. J. Biochem.</i> 46:83-88.
	9.	Calkins et al. (1998). "Inactivation of Tumor Necrosis Factor- α by Proteinases (Gingipains) from the Periodontal Pathogen, <i>Porphyromonas Gingivalis</i> ," <i>J. Biol. Chem.</i> 273(12):6611-6614.
<i>✓</i>	10.	DeCarlo, A.A. and G.J. Harber. (1997). "Hemagglutinin Activity and Heterogeneity of Related <i>Porphyromonas Gingivalis</i> Proteinases," <i>Oral Microbiol. Immunol.</i> 12:47-56.

EXAMINER:

L. Mayo

DATE CONSIDERED:

6/30/03

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>		Docket Number 229752001500 Applicant <div style="text-align: center;">Charles A. COLLYER, et al.</div>	Application Number 09/980,370 International Filing Date: May 26, 2000 Group Art Unit To Be Assigned Mailing Date April 4, 2002
--	--	--	---

	11.	DeCarlo et al. (1997). "Activation and Novel Processing of Matrix Metalloproteinases by a Thiol-Proteinase from the Oral Anaerobe <i>Porphyromonas Gingivalis</i> ," <i>J. Dent. Res.</i> 76(6):1260-1270.
	12.	DeCarlo et al. (1998). "Induction of Matrix Metalloproteinases and a Collagen-Degrading Phenotype in Fibroblasts and Epithelial Cells by Secreted <i>Porphyromonas Gingivalis</i> Proteinase," <i>J. Periodontol Res.</i> 33:408-420.
	13.	DeCarlo et al. (1999). "Porphyrin-Mediated Binding to Hemoglobin by the HA2 Domain of Cysteine Proteinases (Gingipains) and Hemagglutinins from the Periodontal Pathogen <i>Porphyromonas Gingivalis</i> ," <i>J. Bact.</i> 181(12):3784-3791.
	14.	Dzink et al. (1988). "The Predominant Cultivable Microbiota of Active and Inactive Lesions of Destructive Periodontal Diseases," <i>J. Clin. Periodontol</i> 15:316-323.
	15.	Eke et al. (1989). "Cytotoxic Activity of Crude Extracts of <i>Bacteroides Gingivalis</i> ," <i>J. Med. Microb.</i> 28:5-8.
	16.	Eley, B.M. and S.W. Cox. (1996) "Correlation Between Gingivian/ Gingipain and Bacterial Dipeptidyl Peptidase Activity in Gingival Crevicular Fluid and Periodontol Attachment Loss in Chronic Periodontitis Patients. A 2-Year Longitudianl Study," <i>J. Periodontol</i> 67:703-716.
	17.	Evans et al. (1992). "Peridontopathic Potential of Two Strains of <i>Porphyromonas Gingivalis</i> in Gnotobiotic Rats," <i>Arch. Oral Biol.</i> 37(10):813-819.
	18.	Fiehn et al. (1992). "Periodontal Bone Loss in <i>Porphyromonas Gingivalis</i> -Infected Specific Pathogen-Free Rats After Preinoculation with Endogenous <i>Streptococcus Sanguis</i> <i>J. Periodontol Res.</i> 27:609-614.
	19.	Fishburn et al. (1991). "Degradation of Plasma Proteins by the Trypsin-Like Enzyme of <i>Porphyromonas Gingivalis</i> and Inhibition of Protease Activity by a Serine Protease Inhibitor of Human Plasma," <i>Oral Microbiol. Immunol.</i> 6:209-215.
	20.	Fletcher et al. (1997). Interactions Between Periodontopathogenic Bacteria and Cytokines," <i>J. Periodontol Res.</i> 32:200-205.
	21.	Fujimura, S. and T. Nakamura. (1989). "Multiple Forms of Proteases of <i>Bacteroides Gingivalis</i> and Their Cellular Location," <i>Oral Microbiol. Immunol.</i> 4:227-229.
	22.	Grenier, D. and D. Mayrand. (1987). "Functional Characterization of Extracellular Vesicles Produced by <i>Bacteroides Gingivalis</i> ," <i>Infect. Immun.</i> 55(1):111-117.
	23.	Haffajee, A.D. and S.S Socransky. (1994). "Microbial Etiological Agents of Destructive Periodontal Diseases," <i>Periodontology</i> 2000 5:78-111.
	24.	Hanazawa et al. (1985). "Functional Role of Interleukin 1 in Periodontal Disease: Induction of Interleukin 1 Production by <i>Bacteroides Gingivalis</i> Lipopolysaccharide in Peritoneal Macrophages from C3H/HeN and C3H/HeJ Mice," <i>Infect. Immun.</i> 50(1):262-270.
↓	25.	Hanazawa et al. (1991). " <i>Bacteroides (Porphyromonas) Gingivalis</i> Fimbriae Activate Mouse Peritoneal Macrophages and Induce Gene Expression and Production of Interleukin-1," <i>Infect. Immun.</i> 59(6):1972-1977.

EXAMINER:	DATE CONSIDERED:
EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.	

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>		Docket Number 229752001500 Application Number 09/980,370 <hr/> Applicant <p style="text-align: center;">Charles A. COLLYER, et al.</p> <hr/> International Filing Date: May 26, 2000 Group Art Unit To Be Assigned <hr/> Mailing Date April 4, 2002	
--	--	--	--

<i>Jm</i>	26.	Holt et al. (1988). "Implantation of <i>Bacteroides Gingivalis</i> in Nonhuman Primates Initiates Progression of Periodontitis," <i>Science</i> 239:55-57.
	27.	Imamura et al. (1994). Pathogenesis of Periodontitis: A Major Arginine-Specific Cysteine Proteinase from <i>Porphyromonas Gingivalis</i> Induces Vascular Permeability Enhancement through Activation of the Kallikrein/Kinin Pathway," <i>J. Clin. Invest.</i> 94:361-367.
	28.	Imamura et al. (1997). "Activation of Blood Coagulation Factor X by Arginine-Specific Cysteine Proteinases (Gingipain-Rs) from <i>Porphyromonas Gingivalis</i> ," <i>J. Biol. Chem.</i> 272(25):16062-16067.
	29.	Laemmli, U.K. (1970). "Cleavage of Structural Proteins During the Assembly of the Head of Bacteriophage T4," <i>Nature</i> 227:680-685.
	30.	Lantz et al. (1991). "Identification of <i>Porphyromonas Gingivalis</i> Components that Mediate its Interactions with Fibronectin," <i>J. Bacteriol.</i> 173(14):4263-4270.
	31.	Larjava et al. (1987). "Fibronectin Fragmentation Induced by Dental Plaque and <i>Bacteroides Gingivalis</i> ," <i>Scand. J. Dent. Res.</i> 95:308-314.
	32.	Malek et al. (1994). "Inactivation of the <i>Porphyromonas Gingivalis fimA</i> Gene Blocks Periodontal Damage in Gnotobiotic Rats," <i>J. Bacteriol.</i> 176:1052-1059.
	33.	Marmur J. and P. Doty. (1962). "Determination of the Base Composition of Deoxyribonucleic Acid from its Thermal Denaturation Temperature," <i>J. Mol. Biol.</i> 5:109-118.
	34.	McDermid et al. (1988). "Effect of Environmental pH on Enzyme Activity and Growth of <i>Bacteroides Gingivalis</i> W50," <i>Infect. Immun.</i> 56(5):1096-1100.
	35.	Mikolajczyk-Pawlinska et al. (1998). "Genetic Variation of <i>Porphyromonas Gingivalis</i> Genes Encoding Gingipains, Cysteine Proteinases with Arginine or Lysine Specificity," <i>Biol. Chem.</i> 379:205-211.
	36.	Nakayama et al. (1998). "Haemoglobin Receptor Protein is Intragenically Encoded by the Cysteine Proteinase-Encoding Genes and the Haemagglutinin-Encoding Gene of <i>Porphyromonas Gingivalis</i> ," <i>Mol. Microbiol.</i> 27(1):51-61.
	37.	Needleman S.B. and C.D. Wunsch (1970). "A General Method Applicable to the Search for Similarities in the Amino Acid Sequence of Two Proteins," <i>J. Mol. Biol.</i> 48:443-453.
	38.	Nishikata, M. and F. Yoshimura. (1991). "Characterization of <i>Porphyromonas (Bacteroides) Gingivalis</i> Hemagglutinin as a Protease," <i>Biochem. Biophys. Res. Comm.</i> 178(1):336-342.
	39.	Norris, J.M. and D.N. Love. (1995). "Serum Responses of Cats with Periodontal/Gingival Disease to Members of the Genus <i>Porphyromonas</i> ," <i>Clin. Infect. Dis.</i> 20(Suppl. 2):314-316
	40.	Okamoto et al. (1998). "Involvement of a Lysine-Specific Cysteine Proteinase in Hemoglobin Adsorption and Heme Accumulation by <i>Porphyromonas Gingivalis</i> ," <i>J. Biol. Chem.</i> 273(33):21225-21231.
↓	41.	Page, R.C. (1998). "The Pathobiology of Periodontal Diseases May Affect Systemic Diseases: Inversion of a Paradigm," <i>Ann. Periodontol</i> 3:108-120.

EXAMINER: <i>L. Mayes</i>	DATE CONSIDERED: <i>6/30/03</i>
EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.	

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>	Docket Number 229752001500	Application Number 09/980,370
	Applicant Charles A. COLLYER, et al.	
	International Filing Date: May 26, 2000	Group Art Unit To Be Assigned
	Mailing Date April 4, 2002	

42.	Pike et al. (1994). "Lysine- and Arginine-Specific Proteinases from <i>Porphyromonas Gingivalis</i> ," <i>J. Biol. Chem.</i> 269(1):406-411.
43.	Potempa et al. (1995). "The Multiple Forms of Trypsin-like Activity Present in Various Strains of <i>Porphyromonas Gingivalis</i> Are Due to the Presence of either Arg-Gingipain or Lys-Gingipain," <i>Infect. Immun.</i> 63(4):1176-1182.
44.	Qui et al. (1996). "Identification and Characterization of a C(K/R)TC Motif as a Common Epitope Present in All Subtypes of Hepatitis B Surface Antigen," <i>J. Immunol.</i> 156:3350-3356.
45.	Rangarajan et al. (1997). "The <i>prpR1</i> and <i>prR2</i> Arginine-Specific Protease Genes of <i>Porphyromonas Gingivalis</i> W50 Produce Five Biochemically Distinct Enzymes," <i>Mol. Microbiol.</i> 23(5):955-965.
46.	Sato et al. (1987). "Degradation of Human Secretory Immunoglobulin a by Protease Isolated from the Anaerobic Periodontopathogenic Bacterium, <i>Bacteroides Gingivalis</i> ," <i>Arch. Oral Biol.</i> 32(4):235-238.
47.	Scott et al. (1993). "Purification and Characterization of a Potent 70-kDa Thiol Lysyl-Proteinase (Lys-Gingivain) from <i>Porphyromonas Gingivalis</i> that Cleaves Kininogens and Fibrinogen," <i>J. Biol. Chem.</i> 268(11):7935-7942.
48.	Shah, H.N. and S.E. Gharbia. (1989). "Lysis of Erythrocytes by the Secreted Cysteine Proteinase of <i>Porphyromonas Gingivalis</i> W83," <i>FEMS Microbiol. Lett.</i> 61:213-218.
49.	Shi et al. (1999). "Genetic Analyses of Proteolysis, Hemoglobin Binding, and Hemagglutination of <i>Porphyromonas Gingivalis</i> ," <i>J. Biol. Chem.</i> 274(25):17955-17960.
50.	Sismey-Durrant, H.J. and R.M. Hopp. (1991). "Effect of Lipopolysaccharide from <i>Porphyromonas Gingivalis</i> on Prostaglandin E ₂ and Interleukin-1 β Release from Rat Periosteal and Human Gingival Fibroblasts <i>In Vitro</i> ," <i>Oral Microbiol. Immunol.</i> 6:378-380.
51.	Slakeski et al. (1998). "Characterization of a Second Cell-Associated Arg-Specific Cysteine Proteinase of <i>Porphyromonas Gingivalis</i> and Identification of an Adhesin-Binding Motif Involved in Association of the prtR and prtK Proteinases and Adhesins into Large Complexes," <i>Microbiology</i> 144:1583-1592.
52.	Smalley et al. (1998). "The Periodontopathogen <i>Porphyromonas Gingivalis</i> Binds Iron Protoporphyrin IX in the μ -oxo Dimeric Form: An Oxidative Buffer and Possible Pathogenic Mechanism," <i>Biochem J.</i> 331:681-685.
53.	Sorsa et al. (1992). "Identification of Proteases from Periodontopathogenic Bacteria as Activators of Latent Human Neutrophil and Fibroblast-Type Interstitial Collagenases," <i>Infect. Immun.</i> 60(11):4491-4495.
54.	Sundqvist et al. (1988). "Generation and Degradation of the Complement Fragment C5a in Human Serum by <i>Bacteroides Gingivalis</i> ," <i>Oral Microbiol. Immunol.</i> 3:103-107.
55.	Touw et al. (1982). "Butyrate: A Cytotoxin for Vero Cells Produced by <i>Bacteroides Gingivalis</i> and <i>Bacteroides Asaccharolyticus</i> ," <i>Antonie Van Leeuwenhoek</i> 48:315-325.
56.	Towbin et al. (1979). "Electrophoretic Transfer of Proteins from Polyacrylamide Gels to

EXAMINER:

L. Mays

DATE CONSIDERED:

6/30/03

EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.

Form PTO-1449 INFORMATION DISCLOSURE CITATION IN AN APPLICATION (Use several sheets if necessary)	Docket Number 229752001500	Application Number 09/980,370
	Applicant Charles A. COLLYER, et al.	
	International Filing Date: May 26, 2000	Group Art Unit To Be Assigned
	Mailing Date April 4, 2002	

fm		Nitrocellulose Sheets: Procedure and some Applications," <i>Proc. Natl. Acad. Sci. USA</i> 76(9):4350-4354.
↓	57.	Wingrove et al. (1992). "Activation of Complement Components C3 and C5 by a Cysteine Proteinase (Gingipain-1) from <i>Porphyromonas (Bacteroides) Gingivalis</i> ," <i>J. Biol. Chem.</i> 267(26):18902-18907.
↓	58.	Yun et al. (1999). "Modulation of Major Histocompatibility Complex Protein Expression by Human Gamma Interferon Mediated by Cysteine Proteinase-Adhesin Polypeptides of <i>Porphyromonas Gingivalis</i> ," <i>Infect. Immuno.</i> 67(6):2986-2995.

EXAMINER: <i>L. Mays</i>	DATE CONSIDERED: <i>6/30/03</i>
EXAMINER: Initial if citation considered, whether or not the citation conforms with MPEP 609. Draw a line through the citation if not in conformance and not considered. Include a copy of this form with next communication to applicant.	